

July 23, 2014

Ms. Kimberly Tisa
PCB Coordinator
U.S. Environmental Protection Agency Region 1
5 Post Office Square – Suite 100
Boston, Massachusetts 02109-3912

Re: PCB Remediation Plan Modification Request No. 10
Peabody Terrace Housing Facility – PTCC Playground Soils
900 Memorial Drive, Cambridge, Massachusetts

Dear Ms. Tisa:

On behalf of President and Fellows of Harvard College (Harvard), Woodard & Curran has prepared this modification request to the Notification<sup>1</sup> in accordance with Condition 17 of the United States Environmental Protection Agency's (EPA) April 15, 2010 Risk-Based PCB Cleanup and Disposal Approval under 40 CFR 761.61(c) and 761.79(h) (the Approval) for the Peabody Terrace Housing Complex in Cambridge, Massachusetts (the site). This modification request concerns upcoming exterior renovation work which will involve the disturbance of PCB-impacted soils at the subject property. A site locus map is provided as Figure 1.

## **Background**

The Peabody Terrace housing facility consists of three high-rise towers (Buildings X, Y, and Z; 22 stories each) and six lower rise buildings (Buildings A, B, C, D, E, and F; 3-7 stories each) used for Harvard University graduate student housing. Exterior PCB remediation activities were performed at the Site between 2010 and 2013 in accordance with the Approval. The exterior PCB remediation activities, which primarily consisted of exterior caulking removal, concrete encapsulation, and soil excavation, were documented in a Completion Report submitted to EPA on October 2, 2013. Currently, interior remediation activities are on-going consistent with the Notification and Approval.

The exterior remediation activities performed between 2010 and 2013 did *not* include soil excavation at the two Peabody Terrace Children's Center (PTCC) play areas located on the south side of Building D given the following:

- The Play Areas were of "newer" construction and samples of the surface play sand, exposed surface soils, and asphalt or rubberized material in the play areas were collected with PCBs either non-detect or
   1 part per million (ppm) - refer to Notification submittals;
- Subsurface soils were inaccessible for direct contact exposure due to the presence of asphalt pavement or a rubberized play mat ground surface covering.

These play areas are identified as Play Area 1 and Play Area 2 on the attached Site Plan (Figure 2).

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<sup>&</sup>lt;sup>1</sup> The Notification consists of the information submitted by Woodard & Curran to satisfy the requirements under 40 CFR 761.61(c), 761.62, and 761.79(h). Information provided was dated February 16, 2010 (Building A Plan); April 6, 2010 (Buildings B, C, X Plan); February 16, 2011 (Modification Request No. 4 – PCB Remediation Plan Modification – Buildings E, F, and Y); February 27, 2012 (Modification No. 8 – Buildings D and Z Plan); and subsequent modifications and related submittals.



### **Proposed Scope of Work**

Renovations to the two PTCC play areas located on the south side of Building D are scheduled to occur later this summer. The proposed renovations will include the removal of all existing ground surface coverings (asphalt and rubber play mats), excavation and off-site disposal of a minimum of approximately 2 feet of soils beneath the existing ground surface coverings to support the new construction, and rebuild of the areas with new features.

### **Characterization Summary**

In support of the proposed renovation activities, on June 25, 2014, Woodard & Curran implemented a soil characterization program in general accordance with the characterization sampling approach previously approved by EPA for exposed soils adjacent to buildings on the remainder of the Site. The sampling grid developed resulted in a total of 8 sample areas at the western play area (Play Area 1) and a total of 6 sample areas at the eastern play area (Play Area 2). Details on the sampling approach and PCB results from each area are summarized below. A table summarizing the data is provided as Table 1, a sketch of the sample locations is provided as Figure 3, and the analytical laboratory reports for the recently collected data are attached to this letter.

- PTCC Building D western play area (Play Area 1 preschool playground)
  - Existing surfaces are finished with either rubberized play mat or asphalt (asphalt mainly against the building);
  - A total of 8 sample areas were established on an approximate 15-ft x 12.5-ft grid;
  - To assess potential release conditions given the conceptual site model for release from exterior building caulking, the sample areas targeted native soils (i.e., sub-base/fill material placed as part of the playground construction was assumed to be imported and subsequently covered by the asphalt or mat and therefore not representative of past potential release conditions). A total of 6 samples were collected from native soils present beneath the bedding sand layer observed beneath both asphalt and rubberized mat surfaces; depth of the bedding sand layer ranged from 7 to 12 inches below the surface, resulting in sample intervals from the native soils ranging from 7-10 inches up to 12-15 inches below ground surface.
    - PCBs were reported above the 1 ppm unrestricted use cleanup level in 5 out of 6 samples, with concentrations ranging from 1.2 to 3.6 ppm in the native soils.
    - All four samples collected from soils adjacent to the building detected PCBs > 1 ppm; whereas only one of the samples collected further away from the building (approximately 16 feet) detected PCBs > 1 ppm.
  - Two samples were collected from the surface of exposed soils at the base of two trees located within the play area during initial site characterization activities performed in 2009; the depth of these samples was 0-3 inches below ground surface. Based on a review of the proposed renovation plans which indicate that these trees are scheduled to remain in place, no new samples were collected from these grid spaces.
    - PCBs were reported below the 1 ppm unrestricted use cleanup level in both surface soil samples, with concentrations of 0.117 and 0.210 ppm.
- PTCC Building D eastern play area (Play Area 2 infant/toddler playground)
  - Existing surfaces are finished with a rubberized play mat;
  - o A total of 6 sample areas were established on an approximate 15-ft x 12.5-ft grid;



- A total of 5 samples were collected from native soils present beneath the bedding sand layer observed beneath the rubberized mat surface (same rationale as described above); depth of the bedding sand layer ranged up to 24 inches below the surface, resulting in sample intervals from the native soils ranging from 12-15 inches up to 16-19 inches below ground surface.
  - PCBs were reported above the 1 ppm unrestricted use cleanup level in 1 out of the 5 samples, with a concentration of 1.6 ppm in this sample (located adjacent to the building). PCB concentrations in the remaining samples were reported between 0.13 and 0.48 ppm.
- One sample was collected from the surface of exposed soils at the base of a tree located within the play area during initial site characterization activities performed in 2009; the depth of this sample was 0-3 inches below ground surface. Based on a review of the proposed renovation plans which indicate that this tree is scheduled to remain in place, no new samples were collected from this grid space.
  - PCBs were reported below the 1 ppm unrestricted use cleanup level in this surface soil sample, with PCBs reported at a concentration of 0.310 ppm.

### Removal and Verification Plan

As indicated above, PCBs were detected > 1 ppm and < 50 ppm in certain soils presently located beneath existing ground surface coverings at both PTCC play areas located south of Building D; therefore, consistent with previous site determinations, these soils would be considered a PCB Remediation Waste under 40 CFR 761.

In discussions with the project team, it has been decided to manage all soils removed during the renovation project, that is, sub-base/fill, surface play sand, and native soils, as a PCB Remediation Waste and not attempt to segregate soils during the removals. The previously tested hardscape material will be removed and recycled/disposed as asphalt or construction debris prior to the subsurface excavations. Similar to the majority of the soils previously excavated from the Site, the excavated soils will be disposed off-site at the Waste Management Turnkey Recycling & Environmental Enterprise (TREE) facility located in Rochester, New Hampshire.

Consistent with the remedial objectives described in the Approval, the cleanup goal for the PTCC play area is to remediate soils to meet unrestricted use criteria (i.e.,  $PCBs \le 1$  ppm). The remedial approach to address the materials containing PCBs > 1 ppm will be consistent with the approach implemented at other portions of the Site, which generally includes the following:

- Site preparation and controls
  - Prior to any work, the boundaries of the excavation area will be marked and a permit number will be obtained from Dig Safe;
  - Access to the active work areas will be controlled through fencing with controlled access points; support zones will also be established for the work activities;
  - Air monitoring within the support work zone and perimeter to this zone will be conducted during active soil removal and handling in accordance with the air monitoring plan presented in the Notification. To reduce dust levels and exposures to dust, a combination of water suppression and work stoppages may be implemented as part of the work activities, if required.
- Removal and off-site disposal of PCB-impacted soil and bedding sand beneath the ground surface coverings as PCB Remediation Waste in accordance with 40 CFR 761.61;



- Existing ground surface coverings will be sawcut and/or removed by hand, as appropriate;
- O Underlying bedding sand and soils will be excavated using a mini-excavator and transferred into the bucket of a bobcat or small loader; the bobcat or loader will transport the soils from the south side of Building D to lined and labeled roll-off containers staged in the parking area on the north side of Building D or other on-property designated area.

### Limits of excavation:

- The soil excavation in both play areas will initially be advanced to a depth of 2 feet below grade as required by the proposed play area renovations; additional soils may be removed at depths greater than 2 feet if warranted by post-excavation verification data (see below);
- The lateral extent of soil removal will be coincident with the limits of the asphalt pavement or rubber play mat in each area;
- The three existing trees and soils integral to the tree root balls, which were sampled and confirmed to contain PCBs ≤ 1 ppm, are scheduled to remain in place throughout the work.

### Verification Sampling:

- Base of excavation verification samples will be collected from each play area in accordance with the modified 40 CFR 761.280 (Subpart O) sampling plan previously approved for this Site (i.e., a 10-ft by 10-ft sampling grid). Discrete verification samples will be collected from a depth of 0 to 3 inches below the base of the excavation at each play area, resulting in the collection of 18 verification samples from Play Area 1 and 15 verification samples from Play Area 2 (see Figure 4).
- Following collection, samples will be placed in laboratory supplied containers, logged on a standard chain of custody, and stored on ice for delivery to the laboratory. All samples will be extracted using USEPA Method 3540C (Soxhlet extraction) and analyzed for PCBs using USEPA Method 8082.
- Upon receipt of the analytical results, the sample data will be compared to the clean-up levels:
  - If ≤ 1 ppm, the clean-up will be considered complete; and
  - If > 1 ppm, additional soil removal will be performed in the respective grid areas and verification samples will be collected at the frequency indicated above using offset sampling locations. This process will be repeated until a cleanup level ≤ 1 ppm is achieved.

### Site Restoration:

- Final restoration of each area will not be completed until the results of the verification samples have been received and it has been determined that no additional excavation is required.
- The play areas will be backfilled and compacted to the grade required for new play area construction with clean, pre-approved fill material.
- PCB remediation wastes will be transported for off-site disposal under a Bill of Lading for disposal at the Waste Management TREE facility located in Rochester, New Hampshire.
- At the completion of the work, any non-disposable equipment will be decontaminated in accordance with 40 CFR 761.79(c). Disposable materials (e.g., poly sheeting or PPE) will be managed for off-site disposal with the soils.



Following completion of the work activities, a summary report including but not limited to a description
of the work activities, verification analytical results, volumes of disposed materials, and copies of waste
disposal documentation will be prepared and submitted to EPA.

If you have any questions or require further information, please do not hesitate to email me at <a href="mailto:jhamel@woodardcurran.com">jhamel@woodardcurran.com</a> or call me at (978) 557-8150.

Sincerely,

WOODARD & CURRAN INC.

Jeffrey A. Hamel, LSP, LEP Senior Vice President

Enclosures: Table 1 – Soil Characterization Sample Results

Figure 1 – Site Locus Figure 2 - Site Plan

Figure 3 - Characterization Sample Locations
Figure 4 - Proposed Verification Sample Locations

**Analytical Laboratory Reports** 

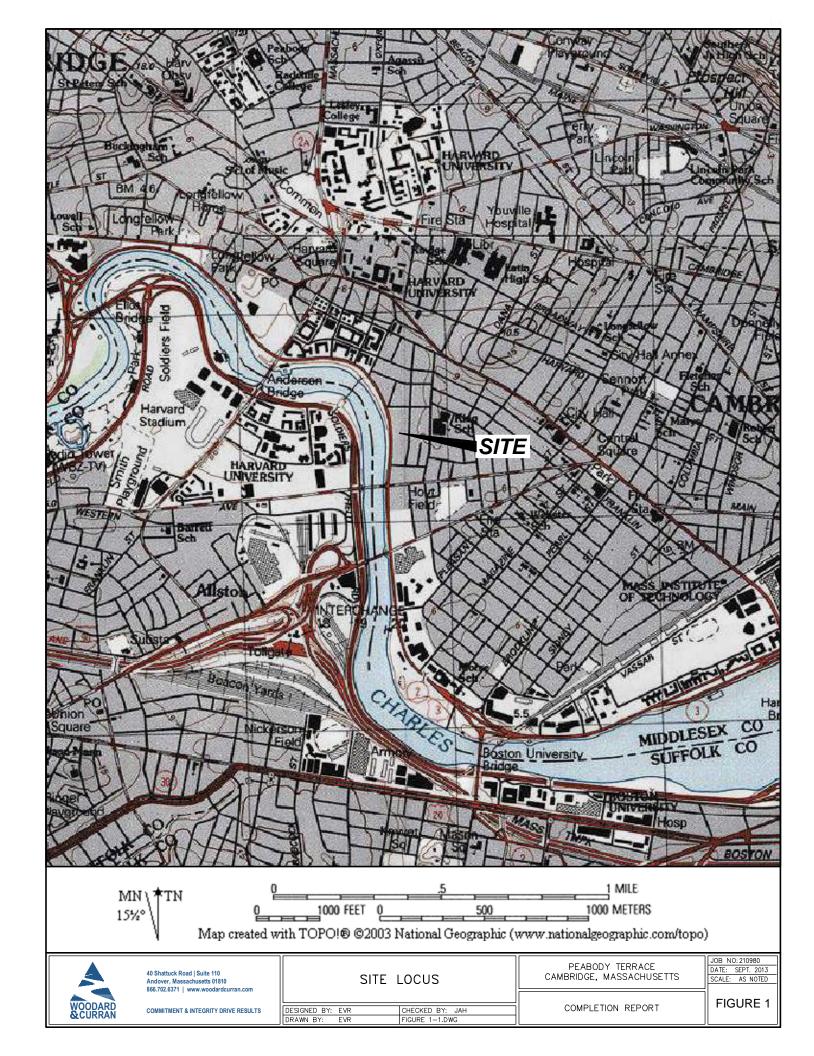
cc: Aaron Townsley, Harvard Chris Packard, Northstar

# Table 1 PTCC Building D Play Area - Soil Characterization Sample Results Peabody Terrace - Harvard University

Media	Sample Depth (in)	Ground Surface Cover	General Location	Sample ID	Date	Detection Limit	Total PCBs
Building D -	· Play Area	1 (Western I	Play Area)				
Soil	12-15	Asphalt	0.5 ft south of Building D; 56 ft west of eastern fence	PTD-CBS-S-1723	6/25/14	0.43	2.7
Soil	12-15	Asphalt	0.5 ft south of Building D; 36 ft west of eastern fence		6/25/14	0.11	1.56
Soil	10-13	Asphalt	0.5 ft south of Building D; 24 ft west of eastern fence		6/25/14	0.45	3.6
Soil	12-15	Asphalt	0.5 ft south of Building D; 8 ft west of eastern fence	PTD-CBS-S-1726	6/25/14	0.11	1.2
Soil	0-3	None	Base of western tree in western play area	PTD-CBS-PA01-0002	9/10/09	0.036	0.117
Soil	7-10	Rubber play mat	16 ft south of Building D; 40 ft west of eastern fence	PTD-CBS-S-1727	6/25/14	0.12	1.57
Soil	0-3	None	Base of eastern tree in western play area	PTD-CBS-PA01-0001	9/10/09	0.033	0.210
Soil	12-15	Rubber play mat	19 ft south of Building D; 8 ft west of eastern fence	PTD-CBS-S-1728	6/25/14	0.12	0.34
Building D -	Play Area	2 (Eastern F	Play Area)				
Soil	16-19	Rubber play mat	0.5 ft south of Building D; 7.5 ft east of western fence	PTD-CBS-S-1729	6/25/14	0.11	0.31
Soil	12-15	Rubber play mat	0.5 ft south of Building D; 22.5 ft east of western fence	PTD-CBS-S-1730	6/25/14	0.10	0.13
Soil	14-17	Rubber play mat	0.5 ft south of Building D; 37.5 ft east of western fence	PTD-CBS-S-1731	6/25/14	0.23	1.6
Soil	12-15	Rubber play mat	18 ft south of Building D; 7.5 ft east of western fence	PTD-CBS-S-1732	6/25/14	0.11	0.48
Soil	0-3	None	Base of single tree in eastern play area	PTD-CBS-PA02-0007	9/10/09	0.050	0.310
Soil	12-15	Rubber play mat	14 ft south of Building D; 37.5 ft east of western fence	PTD-CBS-S-1733	6/25/14	0.11	0.24

### Notes:

- 1. All samples were extracted by USEPA Method 3540C (Soxhlet) and analyzed by USEPA Method 8082.
- 2. Sample results are presented in milligrams per kilogram (mg/kg).
- 3. Sample depth is measured in inches below ground surface, where 0 represents ground surface.
- 4. ND = Not detected above laboratory's minimum reporting limit, as indicated.
- 5. A **bold** concentration indicates an exceedance of the 1 ppm target cleanup level.

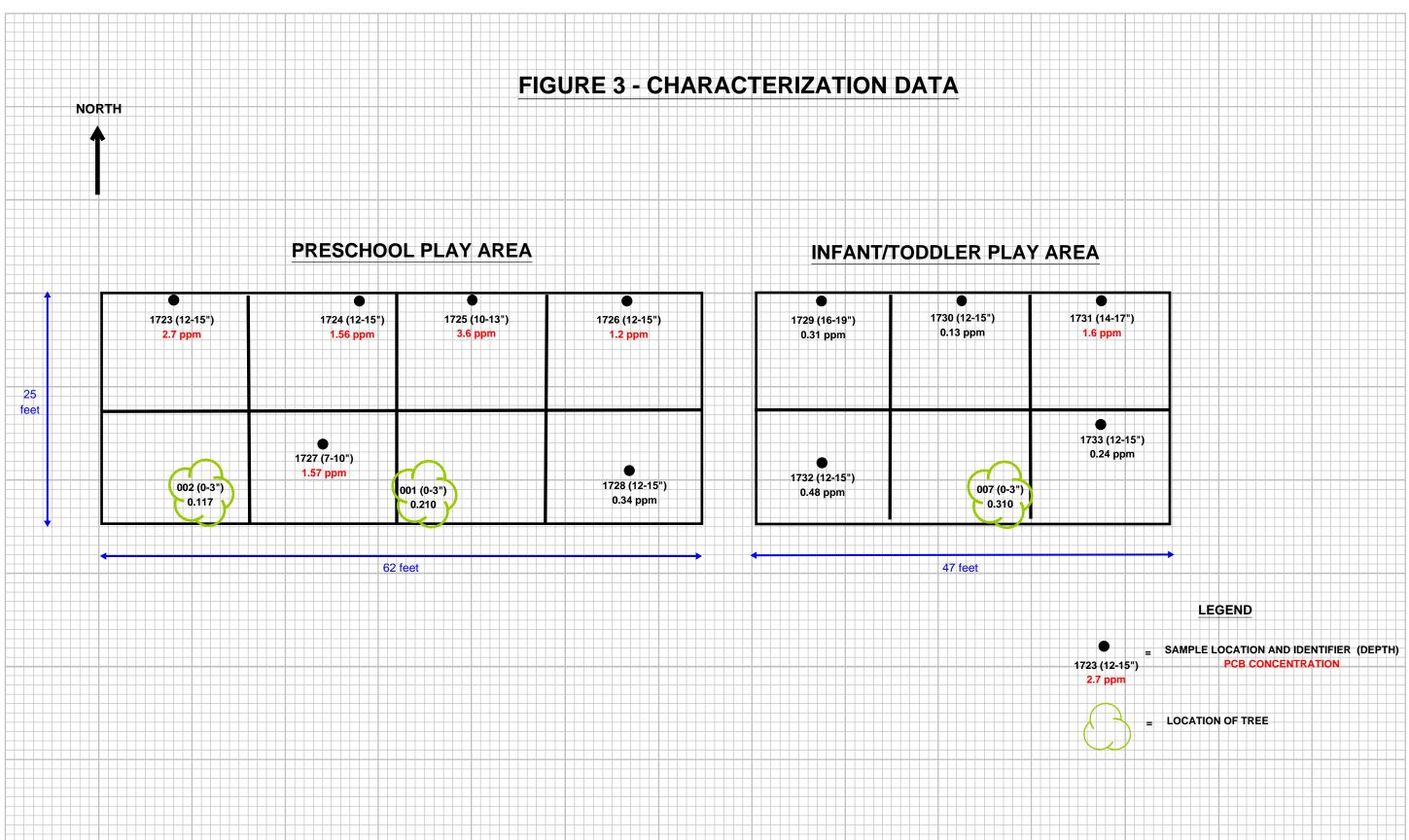






40 SHATTUCK ROAD | SUITE 110 ANDOVER, MASSACHUSETTS 01810 TEL. 978.557.8150

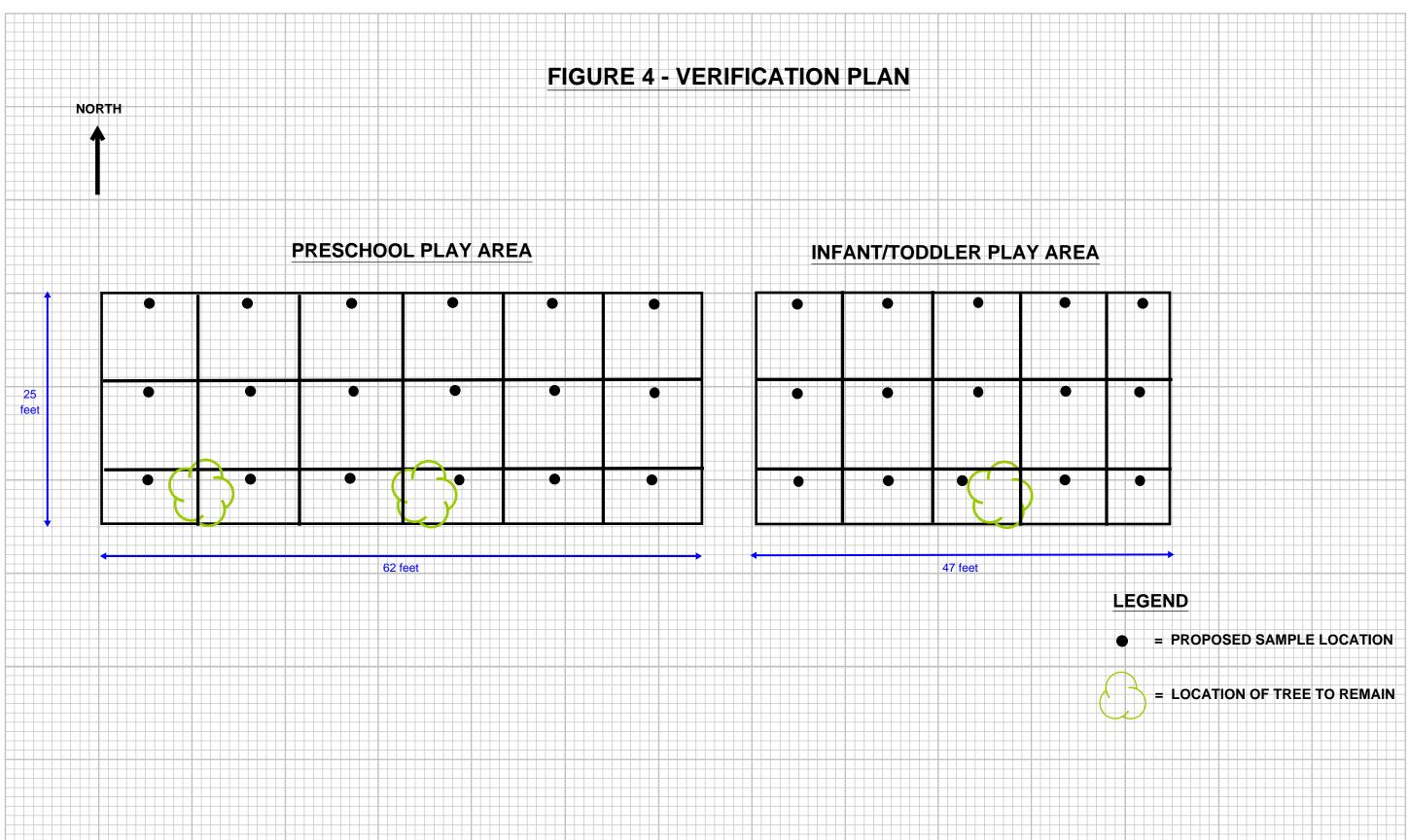
CLIENT	HARVARD					
PROJECT	PEABODY TERRACE					
DESIGNED BY		DATE _	July	9, 20	014	
CHECKED BY_		DATE _				
PRO JECT NO	210980	SHEET NO	1	OF	1	





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CLIENT	HARVARD				
PROJECT	PEABODY TERRACE				
DESIGNED BY		DATE _	July	9, 20	014
CHECKED BY_		DATE _			
PROJECT NO	210980	SHEET NO	1	OF	1





July 2, 2014

Amy Martin Woodard & Curran - Andover, MA 40 Shattuck Road., Suite 110 Andover, MA 01810

Project Location: Harvard - Peabody Terrace

Client Job Number: Project Number: 210980

Laboratory Work Order Number: 14F1211

Meghan S. Kelley

Enclosed are results of analyses for samples received by the laboratory on June 25, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley Project Manager

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Woodard & Curran - Andover, MA 40 Shattuck Road., Suite 110 Andover, MA 01810 ATTN: Amy Martin

REPORT DATE: 7/2/2014

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 210980

### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14F1211

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Harvard - Peabody Terrace

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PTD-CBS-S-1726	14F1211-01	Soil		SM 2540G	
				SW-846 8082A	
PTD-CBS-S-1725	14F1211-02	Soil		SM 2540G	
				SW-846 8082A	
PTD-CBS-S-1723	14F1211-03	Soil		SM 2540G	
				SW-846 8082A	
PTD-CBS-S-1724	14F1211-04	Soil		SM 2540G	
				SW-846 8082A	
PTD-CBS-S-1727	14F1211-05	Soil		SM 2540G	
				SW-846 8082A	
PTD-CBS-S-1728	14F1211-06	Soil		SM 2540G	
				SW-846 8082A	
PTD-CBS-S-1729	14F1211-07	Soil		SM 2540G	
				SW-846 8082A	
PTD-CBS-S-1730	14F1211-08	Soil		SM 2540G	
				SW-846 8082A	
PTD-CBS-S-1731	14F1211-09	Soil		SM 2540G	
				SW-846 8082A	
PTD-CBS-S-1732	14F1211-10	Soil		SM 2540G	
				SW-846 8082A	
PTD-CBS-S-1733	14F1211-11	Soil		SM 2540G	
				SW-846 8082A	



### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Michael A. Erickson Laboratory Director

Culu



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1726

Sampled: 6/25/2014 09:15

Sample ID: 14F1211-01
Sample Matrix: Soil

	Polychlorinated Biphenyls with 3540 Soxhlet Extraction											
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst			
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 17:59	JMB			
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 17:59	JMB			
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 17:59	JMB			
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 17:59	JMB			
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 17:59	JMB			
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 17:59	JMB			
Aroclor-1260 [2]	1.2	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 17:59	JMB			
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 17:59	JMB			
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 17:59	JMB			
Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				-			
Decachlorobiphenyl [1]		85.0	30-150					7/1/14 17:59				
Decachlorobiphenyl [2]		84.5	30-150					7/1/14 17:59				
Tetrachloro-m-xylene [1]		89.5	30-150					7/1/14 17:59				
Tetrachloro-m-xylene [2]		97.5	30-150					7/1/14 17:59				



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1726 Sampled: 6/25/2014 09:15

Sample ID: 14F1211-01
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		92.8		% Wt	1		SM 2540G	6/30/14	7/1/14 12:04	MRI



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

**Field Sample #: PTD-CBS-S-1725** Sampled: 6/25/2014 09:40

Sample ID: 14F1211-02
Sample Matrix: Soil

Polychloringted	Rinhanyle with	3540 Soxhlet Extraction	

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.45	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:45	JMB
Aroclor-1221 [1]	ND	0.45	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:45	JMB
Aroclor-1232 [1]	ND	0.45	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:45	JMB
Aroclor-1242 [1]	ND	0.45	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:45	JMB
Aroclor-1248 [1]	ND	0.45	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:45	JMB
Aroclor-1254 [1]	1.3	0.45	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:45	JMB
Aroclor-1260 [2]	2.3	0.45	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:45	JMB
Aroclor-1262 [1]	ND	0.45	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:45	JMB
Aroclor-1268 [1]	ND	0.45	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:45	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		71.4	30-150					7/1/14 20:45	
Decachlorobiphenyl [2]		68.5	30-150					7/1/14 20:45	
Tetrachloro-m-xylene [1]		73.7	30-150					7/1/14 20:45	
Tetrachloro-m-xylene [2]		76.7	30-150					7/1/14 20:45	



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1725 Sampled: 6/25/2014 09:40

Sample ID: 14F1211-02
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		88 7		% Wt	1		SM 2540G	6/30/14	7/1/14 12:04	MRI



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1723 Sampled: 6/25/2014 11:25

Sample ID: 14F1211-03
Sample Matrix: Soil

D - I I - I	D211241-	2540 C1-1-4	E-4
Polychlorinated	Bibnenvis with	3540 Soxniei	Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:57	JMB
Aroclor-1221 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:57	JMB
Aroclor-1232 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:57	JMB
Aroclor-1242 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:57	JMB
Aroclor-1248 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:57	JMB
Aroclor-1254 [1]	1.6	0.43	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:57	JMB
Aroclor-1260 [1]	1.1	0.43	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:57	JMB
Aroclor-1262 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:57	JMB
Aroclor-1268 [1]	ND	0.43	mg/Kg dry	20		SW-846 8082A	6/27/14	7/1/14 20:57	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		60.5	30-150					7/1/14 20:57	
Decachlorobiphenyl [2]		59.8	30-150					7/1/14 20:57	
Tetrachloro-m-xylene [1]		61.3	30-150					7/1/14 20:57	
Tetrachloro-m-xylene [2]		63.1	30-150					7/1/14 20:57	



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1723

Sampled: 6/25/2014 11:25

Sample ID: 14F1211-03
Sample Matrix: Soil

			0.4635.3 3 (00 . 1)
Conventional Chemistry	Parameters by	/ EPA/APHA/SW-	846 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		91.5		% Wt	1		SM 2540G	6/30/14	7/1/14 12:04	MRI



Project Location: Harvard - Peabody Terrace Work Order: 14F1211 Sample Description:

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1724

Sampled: 6/25/2014 11:20

Sample ID: 14F1211-04 Sample Matrix: Soil

Polychlorinated	Rinhenvls with	3540 Soxblet	Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 18:37	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 18:37	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 18:37	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 18:37	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 18:37	JMB
Aroclor-1254 [1]	0.56	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 18:37	JMB
Aroclor-1260 [2]	1.0	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 18:37	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 18:37	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 18:37	JMB
Surrogates		% Recovery	Recovery Limits	,	Flag/Qual				
Decachlorobiphenyl [1]		75.3	30-150					7/1/14 18:37	
Decachlorobiphenyl [2]		77.9	30-150					7/1/14 18:37	
Tetrachloro-m-xylene [1]		79.7	30-150					7/1/14 18:37	
Tetrachloro-m-xylene [2]		86.8	30-150					7/1/14 18:37	



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

**Field Sample #: PTD-CBS-S-1724** Sampled: 6/25/2014 11:20

Sample ID: 14F1211-04
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		90.7		% Wt	1		SM 2540G	6/30/14	7/1/14 12:04	MRL



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

**Field Sample #: PTD-CBS-S-1727** Sampled: 6/25/2014 11:30

Sample ID: 14F1211-05
Sample Matrix: Soil

A., -1	D 14-	RL	TI	D:14:	FI/OI	Madead	Date	Date/Time	A l4
Analyte	Results	KL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:15	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:15	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:15	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:15	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:15	JMB
Aroclor-1254 [1]	1.2	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:15	JMB
Aroclor-1260 [2]	0.37	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:15	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:15	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:15	JMB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
Decachlorobiphenyl [1]		74.4	30-150					7/1/14 19:15	
Decachlorobiphenyl [2]		74.6	30-150					7/1/14 19:15	
Tetrachloro-m-xylene [1]		75.3	30-150					7/1/14 19:15	
Tetrachloro-m-xylene [2]		82.4	30-150					7/1/14 19:15	



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

**Field Sample #: PTD-CBS-S-1727** Sampled: 6/25/2014 11:30

Sample ID: 14F1211-05
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		84.5		% Wt	1		SM 2540G	6/30/14	7/1/14 12:04	MRI



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

**Field Sample #: PTD-CBS-S-1728** Sampled: 6/25/2014 11:35

Sample ID: 14F1211-06
Sample Matrix: Soil

Polychlorinated	Rinhenvls with	3540 Soxblet	Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:28	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:28	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:28	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:28	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:28	JMB
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:28	JMB
Aroclor-1260 [2]	0.34	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:28	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:28	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:28	JMB
Surrogates		% Recovery	Recovery Limits	1	Flag/Qual				
Decachlorobiphenyl [1]		83.0	30-150					7/1/14 19:28	
Decachlorobiphenyl [2]		84.3	30-150					7/1/14 19:28	
Tetrachloro-m-xylene [1]		84.2	30-150					7/1/14 19:28	
Tetrachloro-m-xylene [2]		92.1	30-150					7/1/14 19:28	



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Sample Matrix: Soil

Field Sample #: PTD-CBS-S-1728

Sample ID: 14F1211-06

Sampled: 6/25/2014 11:35

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		85.5		% Wt	1		SM 2540G	6/30/14	7/1/14 12:04	MRL



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

**Field Sample #: PTD-CBS-S-1729** Sampled: 6/25/2014 14:10

Sample ID: 14F1211-07
Sample Matrix: Soil

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Analyte	Results	KL	Units	Dilution	r iag/Quai	Method	Trepareu	Allalyzeu	Anaiyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:41	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:41	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:41	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:41	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:41	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:41	JMB
Aroclor-1260 [2]	0.31	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:41	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:41	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:41	JMB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
Decachlorobiphenyl [1]		91.6	30-150					7/1/14 19:41	
Decachlorobiphenyl [2]		87.5	30-150					7/1/14 19:41	
Tetrachloro-m-xylene [1]		93.7	30-150					7/1/14 19:41	
Tetrachloro-m-xylene [2]		102	30-150					7/1/14 19:41	



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1729

Sampled: 6/25/2014 14:10

Sample ID: 14F1211-07
Sample Matrix: Soil

Conventional (	Themistry Para	meters by FP	A / A PH A /SW_84	16 Methods (Total)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		87.6		% Wt	1		SM 2540G	6/30/14	7/1/14 12:04	MRL



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1730

Sampled: 6/25/2014 15:15

Sample ID: 14F1211-08

Sample Matrix: Soil

Sample Matrix: Soil									
		Polychlori	nated Biphenyls wi	th 3540 Soxh	let Extraction				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	mg/Kg dry	5	1 mg/ 2 mm	SW-846 8082A	6/27/14	7/1/14 19:54	JMB
Aroclor-1221 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:54	JMB
Aroclor-1232 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:54	JMB
Aroclor-1242 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:54	JMB
Aroclor-1248 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:54	JMB
Aroclor-1254 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:54	JMB
Aroclor-1260 [1]	0.13	0.10	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:54	JMB
Aroclor-1262 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:54	JMB
Aroclor-1268 [1]	ND	0.10	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 19:54	JMB
Surrogates		% Recovery	Recovery Limit	s	Flag/Qual				
Decachlorobiphenyl [1]		78.6	30-150					7/1/14 19:54	
Decachlorobiphenyl [2]		79.0	30-150					7/1/14 19:54	
Tetrachloro-m-xylene [1]		81.6	30-150					7/1/14 19:54	
Tetrachloro-m-xylene [2]		89.1	30-150					7/1/14 19:54	



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1730

Sampled: 6/25/2014 15:15

Sample ID: 14F1211-08
Sample Matrix: Soil

Conventional	Chemistry Parameter	tore by FPA/A	DH A /SW/ 246 1	Mathade (Tatal)

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		95.6		% Wt	1		SM 2540G	6/30/14	7/1/14 12:04	MRL



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

**Field Sample #: PTD-CBS-S-1731** Sampled: 6/25/2014 14:50

Sample ID: 14F1211-09
Sample Matrix: Soil

Dalvahlaninatad	Dinhonyla wit	h 2540 Carble	t Extuastion
Polychlorinated	Diplicity is wit	11 2240 20XIII	TEXTIACTION

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	6/27/14	7/2/14 0:34	JMB
Aroclor-1221 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	6/27/14	7/2/14 0:34	JMB
Aroclor-1232 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	6/27/14	7/2/14 0:34	JMB
Aroclor-1242 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	6/27/14	7/2/14 0:34	JMB
Aroclor-1248 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	6/27/14	7/2/14 0:34	JMB
Aroclor-1254 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	6/27/14	7/2/14 0:34	JMB
Aroclor-1260 [2]	1.6	0.23	mg/Kg dry	10		SW-846 8082A	6/27/14	7/2/14 0:34	JMB
Aroclor-1262 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	6/27/14	7/2/14 0:34	JMB
Aroclor-1268 [1]	ND	0.23	mg/Kg dry	10		SW-846 8082A	6/27/14	7/2/14 0:34	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		79.2	30-150					7/2/14 0:34	
Decachlorobiphenyl [2]		79.0	30-150					7/2/14 0:34	
Tetrachloro-m-xylene [1]		77.8	30-150					7/2/14 0:34	
Tetrachloro-m-xylene [2]		83.2	30-150					7/2/14 0:34	



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

**Field Sample #: PTD-CBS-S-1731** Sampled: 6/25/2014 14:50

Sample ID: 14F1211-09
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		85.9		% Wt	1		SM 2540G	6/30/14	7/1/14 12:04	MRL



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1732 Sampled: 6/25/2014 15:05

Sample ID: 14F1211-10
Sample Matrix: Soil

Polychlorinated	Rinhenvls with	3540 Soxblet	Extraction

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:19	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:19	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:19	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:19	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:19	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:19	JMB
Aroclor-1260 [2]	0.48	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:19	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:19	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:19	JMB
Surrogates		% Recovery	Recovery Limits	3	Flag/Qual				
Decachlorobiphenyl [1]		87.1	30-150					7/1/14 20:19	
Decachlorobiphenyl [2]		90.8	30-150					7/1/14 20:19	
Tetrachloro-m-xylene [1]		95.3	30-150					7/1/14 20:19	
Tetrachloro-m-xylene [2]		104	30-150					7/1/14 20:19	



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1732 Sampled: 6/25/2014 15:05

Sample ID: 14F1211-10
Sample Matrix: Soil

		Conventional Chemis	stry Parameters by	y EPA/APHA/	SW-846 Methods	(Total)			
							Date	Date/Time	
	Analyte	Results RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		91.2	% Wt	1		SM 2540G	6/30/14	7/1/14 12:04	MRL



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

**Field Sample #: PTD-CBS-S-1733** Sampled: 6/25/2014 14:45

Sample ID: 14F1211-11
Sample Matrix: Soil

D - I I - I	D: b1:4b	2540 C	4 E-4
Polychlorinated	Bibnenvis with	3540 Soxnie	t Extraction

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:32	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:32	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:32	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:32	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:32	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:32	JMB
Aroclor-1260 [2]	0.24	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:32	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:32	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	6/27/14	7/1/14 20:32	JMB
Surrogates		% Recovery	Recovery Limits	;	Flag/Qual				-
Decachlorobiphenyl [1]		77.5	30-150					7/1/14 20:32	
Decachlorobiphenyl [2]		80.0	30-150					7/1/14 20:32	
Tetrachloro-m-xylene [1]		70.7	30-150					7/1/14 20:32	
Tetrachloro-m-xylene [2]		77.4	30-150					7/1/14 20:32	



Project Location: Harvard - Peabody Terrace Sample Description: Work Order: 14F1211

Date Received: 6/25/2014

Field Sample #: PTD-CBS-S-1733 Sampled: 6/25/2014 14:45

Sample ID: 14F1211-11
Sample Matrix: Soil

								Date	Date/Time	
	Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids		88.0		% Wt	1		SM 2540G	6/30/14	7/1/14 12:04	MRL



#### **Sample Extraction Data**

#### Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14F1211-01 [PTD-CBS-S-1726]	B099043	06/30/14
14F1211-02 [PTD-CBS-S-1725]	B099043	06/30/14
14F1211-03 [PTD-CBS-S-1723]	B099043	06/30/14
14F1211-04 [PTD-CBS-S-1724]	B099043	06/30/14
14F1211-05 [PTD-CBS-S-1727]	B099043	06/30/14
14F1211-06 [PTD-CBS-S-1728]	B099043	06/30/14
14F1211-07 [PTD-CBS-S-1729]	B099043	06/30/14
14F1211-08 [PTD-CBS-S-1730]	B099043	06/30/14
14F1211-09 [PTD-CBS-S-1731]	B099043	06/30/14
14F1211-10 [PTD-CBS-S-1732]	B099043	06/30/14
14F1211-11 [PTD-CBS-S-1733]	B099043	06/30/14

#### Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14F1211-01 [PTD-CBS-S-1726]	B098949	10.0	10.0	06/27/14
14F1211-02 [PTD-CBS-S-1725]	B098949	10.1	10.0	06/27/14
14F1211-03 [PTD-CBS-S-1723]	B098949	10.0	10.0	06/27/14
14F1211-04 [PTD-CBS-S-1724]	B098949	10.0	10.0	06/27/14
14F1211-05 [PTD-CBS-S-1727]	B098949	10.0	10.0	06/27/14
14F1211-06 [PTD-CBS-S-1728]	B098949	10.1	10.0	06/27/14
14F1211-07 [PTD-CBS-S-1729]	B098949	10.0	10.0	06/27/14
14F1211-08 [PTD-CBS-S-1730]	B098949	10.0	10.0	06/27/14
14F1211-09 [PTD-CBS-S-1731]	B098949	10.0	10.0	06/27/14
14F1211-10 [PTD-CBS-S-1732]	B098949	10.1	10.0	06/27/14
14F1211-11 [PTD-CBS-S-1733]	B098949	10.0	10.0	06/27/14



#### QUALITY CONTROL

#### Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B098949 - SW-846 3540C										
Blank (B098949-BLK1)			:	Prepared: 06	5/27/14 Anal	yzed: 07/01/1	14			
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.172		mg/Kg wet	0.200		86.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.179		mg/Kg wet	0.200		89.6	30-150			
Surrogate: Tetrachloro-m-xylene	0.161		mg/Kg wet	0.200		80.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.185		mg/Kg wet	0.200		92.7	30-150			
LCS (B098949-BS1)				Prepared: 06	5/27/14 Anal	yzed: 07/01/1	14			
Aroclor-1016	0.15	0.10	mg/Kg wet	0.200		72.8	40-140			
Aroclor-1016 [2C]	0.15	0.10	mg/Kg wet	0.200		77.2	40-140			
Aroclor-1260	0.14	0.10	mg/Kg wet	0.200		72.0	40-140			
Aroclor-1260 [2C]	0.15	0.10	mg/Kg wet	0.200		73.5	40-140			
Surrogate: Decachlorobiphenyl	0.145		mg/Kg wet	0.200		72.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.138		mg/Kg wet	0.200		69.0	30-150			
Surrogate: Tetrachloro-m-xylene	0.130		mg/Kg wet	0.200		64.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.141		mg/Kg wet	0.200		70.6	30-150			
.CS Dup (B098949-BSD1)				Prepared: 06	5/27/14 Anal	yzed: 07/01/1	14			
Aroclor-1016	0.14	0.10	mg/Kg wet	0.200		68.7	40-140	5.88	30	
Aroclor-1016 [2C]	0.14	0.10	mg/Kg wet	0.200		71.6	40-140	7.48	30	
Aroclor-1260	0.14	0.10	mg/Kg wet	0.200		67.7	40-140	6.12	30	
Aroclor-1260 [2C]	0.14	0.10	mg/Kg wet	0.200		69.0	40-140	6.28	30	
Surrogate: Decachlorobiphenyl	0.131		mg/Kg wet	0.200		65.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.124		mg/Kg wet	0.200		62.0	30-150			
Surrogate: Tetrachloro-m-xylene	0.116		mg/Kg wet	0.200		58.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.125		mg/Kg wet	0.200		62.7	30-150			



#### QUALITY CONTROL

#### Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B098949 - SW-846 3540C										
Matrix Spike (B098949-MS1)	Sou	rce: 14F1211	-11	Prepared: 06	5/27/14 Analy:	zed: 07/01/	14			
Aroclor-1016	0.20	0.11	mg/Kg dry	0.227	0.0	87.1	40-140			
Aroclor-1016 [2C]	0.20	0.11	mg/Kg dry	0.227	0.0	87.8	40-140			
Aroclor-1260	0.38	0.11	mg/Kg dry	0.227	0.24	64.7	40-140			
Aroclor-1260 [2C]	0.39	0.11	mg/Kg dry	0.227	0.24	65.7	40-140			
Surrogate: Decachlorobiphenyl	0.164		mg/Kg dry	0.227		72.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.166		mg/Kg dry	0.227		73.1	30-150			
Surrogate: Tetrachloro-m-xylene	0.166		mg/Kg dry	0.227		73.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.178		mg/Kg dry	0.227		78.7	30-150			
Matrix Spike Dup (B098949-MSD1)	Sou	rce: 14F1211	-11	Prepared: 06	5/27/14 Analys	zed: 07/01/	14			
Aroclor-1016	0.20	0.11	mg/Kg dry	0.227	0.0	88.6	40-140	1.72	50	
Aroclor-1016 [2C]	0.21	0.11	mg/Kg dry	0.227	0.0	91.7	40-140	4.36	50	
Aroclor-1260	0.39	0.11	mg/Kg dry	0.227	0.24	66.1	40-140	0.843	50	
Aroclor-1260 [2C]	0.39	0.11	mg/Kg dry	0.227	0.24	67.4	40-140	1.01	50	
Surrogate: Decachlorobiphenyl	0.173		mg/Kg dry	0.227		76.1	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.173		mg/Kg dry	0.227		76.3	30-150			
Surrogate: Tetrachloro-m-xylene	0.175		mg/Kg dry	0.227		77.1	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.187		mg/Kg dry	0.227		82.6	30-150			



#### QUALITY CONTROL

#### $Conventional\ Chemistry\ Parameters\ by\ EPA/APHA/SW-846\ Methods\ (Total)\ -\ Quality\ Control$

Analyte	Result	Reporting Limit Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B099043 - % Solids									
Duplicate (B099043-DUP2)	Source	<b>Source: 14F1211-11</b> Pre		Prepared: 06/30/14 Analyzed: 07/01/14		4			
% Solids	87.6	% Wt		88.0			0.456	20	
Duplicate (B099043-DUP3)	Source	Source: 14F1211-01 Pr		Prepared: 06/30/14 Analyzed: 07/01/14		4			
% Solids	92.5	% Wt		92.8			0.324	20	



### **IDENTIFICATION SUMMARY** FOR SINGLE COMPONENT ANALYTES

PTD-CBS-S-1726

SW-846 8082A

La	ab Sample ID:	14F1211-01		Date(s) Analyzed: 07/01/20		/zed: 07/01/2014	07/0	1/2014		
In	strument ID (1):			lr	nstrument ID	(2):				
G	C Column (1):	ID:	(m	nm) G	GC Column (	2):	ID:	(mm		
	ANALYTE	UVTE COL		E COL R		RT W	WINDOW CONCENTRA		%D	]
	ANALTIE	COL	RT	FROM	то	CONCENTRATION	/6D			
	Aroclor-1260	1	0.00	0.00	0.00	1.2		]		
		2	0.00	0.00	0.00	1.2	3.4			



### IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PTD-CBS-S-1725

Lab Sample ID:	14F1211-02		Date(s) Analyzed:	07/01/2014	07/01	/2014
Instrument ID (1):			Instrument ID (2):			
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)
		<u> </u>				

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%D
7,0,7,2112	002	111	FROM	TO	OONOLIVITUATION	700
Aroclor-1254	1	0.00	0.00	0.00	1.3	
	2	0.00	0.00	0.00	1.1	13.6
Aroclor-1260	1	0.00	0.00	0.00	2.0	
	2	0.00	0.00	0.00	2.3	13.0



### IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PTD-CBS-S-1723

Lab Sample ID:	14F1211-03		Date(s) Analyzed:	07/01/2014	07/01	/2014
Instrument ID (1):			Instrument ID (2):			
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%D
7.00.2112	002		FROM	TO	0011021111111111111	705
Aroclor-1254	1	0.00	0.00	0.00	1.6	
	2	0.00	0.00	0.00	1.5	8.3
Aroclor-1260	1	0.00	0.00	0.00	1.1	
	2	0.00	0.00	0.00	1.0	8.6



### IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PTD-CBS-S-1724

Lab Sample ID:	14F1211-04		Date(s) Analy	yzed: 07/01/2	014 07/0	01/2014
Instrument ID (1):			Instrument IE	0 (2):		
GC Column (1):	ID:	(m	nm) GC Column (	(2):	ID:	(mm)
ANALYTE	-	ВТ	RT WINDOW	CONCENTRATION	ON	]

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%D
7.10.12112	002		FROM	TO	0011021111111111111	705
Aroclor-1254	1	0.00	0.00	0.00	0.56	
	2	0.00	0.00	0.00	0.56	0.7
Aroclor-1260	1	0.00	0.00	0.00	0.92	
	2	0.00	0.00	0.00	1.0	8.6



### IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PTD-CBS-S-1727

Lab Sample ID:	14F1211-05		Date(s) Analyzed:	07/01/2014	07/01	/2014
Instrument ID (1):			Instrument ID (2):			
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
7,0,7,2112	002	111	FROM	TO	OONOLIVITUATION	20
Aroclor-1254	1	0.00	0.00	0.00	1.2	
	2	0.00	0.00	0.00	1.1	5.3
Aroclor-1260	1	0.00	0.00	0.00	0.35	
	2	0.00	0.00	0.00	0.37	6.4



### IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PTD-CBS-S-1728

La	b Sample ID: 14F	1211-06		Date(s) Analyzed: 07/01/2014			07/0	1/2014
Ins	strument ID (1):			Ir	strument ID	(2):		
G	C Column (1):	ID:	(m	nm) G	C Column (2	2):	ID:	(mm)
	ANALYTE	COL	RT	RT W	INDOW	CONCENTRATION	%D	]
	7.14.ETTE	002	111	FROM	ТО	OONOLIVIION	700	
Ī	Aroclor-1260	1	0.00	0.00	0.00	0.32		]
ı		2	0.00	0.00	0.00	0.34	7.3	



### IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PTD-CBS-S-1729

La	b Sample ID:	14F1211-07		Date(s) Analyzed: 07/01/2014		07/0	07/01/2014	
Ins	strument ID (1):			lr	nstrument ID	(2):		
G	C Column (1):	ID:	(n	nm) G	C Column (2	2):	ID:	(mm
	ANALYTE	COL	RT	RT W	INDOW	CONCENTRATION	%D	]
	ANALTIE	COL	N I	FROM	ТО	CONCENTRATION	/00	
	Aroclor-1260	1	0.00	0.00	0.00	0.30		]
		2	0.00	0.00	0.00	0.31	2.3	



### IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PTD-CBS-S-1730

La	b Sample ID: 14F	Date(s) Analyzed: 07/01/2014				07/0	07/01/2014	
Ins	strument ID (1):			In	strument ID	(2):		
G	C Column (1):	ID:	(m	ım) G	C Column (2	2):	ID:	(mm)
	ANALYTE	COL	RT	RT W	INDOW	CONCENTRATION	%D	
	7	001		FROM	ТО		702	
	Aroclor-1260	1	0.00	0.00	0.00	0.13		
		2	0.00	0.00	0.00	0.12	6.5	



### IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PTD-CBS-S-1731

La	b Sample ID: 14F	1211-09		Date(s) Analyzed: 07/02/2014		07/0	07/02/2014		
Ins	strument ID (1): Instrument ID (2):								
G	C Column (1):	ID:	(m	nm) GC Column (2):			ID:	(mm)	
	ANALYTE	COL	RT	RT W	INDOW	CONC	ENTRATION	%D	
	7.17.121.12		111	FROM	то		ZIVII (MION	700	
	Aroclor-1260	1	0.00	0.00	0.00		1.4		
		2	0.00	0.00	0.00		1.6	11.9	



### IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PTD-CBS-S-1732

La	b Sample ID:	14F1211-10	-10 Date(s) Analyzed: 07/01/2014		07/01/2014			
Ins	strument ID (1):			lr	nstrument ID	(2):		
G	C Column (1):	ID:	(m	nm) G	GC Column (2	2):	ID:	(mm
	ANALYTE	COL	RT	RT W	INDOW	CONCENTRATION	%D	1
	ANALITE	COL	N I	FROM	ТО	CONCENTRATION	/00	
	Aroclor-1260	1	0.00	0.00	0.00	0.45		]
		2	0.00	0.00	0.00	0.48	7.3	]



### IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PTD-CBS-S-1733

La	ab Sample ID: 14F	1211-11		Date(s) Analyzed: 07/01/2014		07/0	07/01/2014	
In	strument ID (1):			I	nstrument ID	(2):		
G	C Column (1):	ID:	(m	nm) (	GC Column (	2):	ID:	(mm)
	ANALYTE	COL	RT	RT W	/INDOW	CONCENTRATION	%D	
	ANALITE		111	FROM	то	CONCLINITIATION	/00	
	Aroclor-1260	1	0.00	0.00	0.00	0.24		
		2	0.00	0.00	0.00	0.24	1.7	



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS	

Lab Sample ID:	B098949-BS1		Date(s) Analyzed:	07/01/2014	07/01	/2014
Instrument ID (1):			Instrument ID (2):			
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT RT WINDOW		CONCENTRATION	%D	
7.00.2112	002		FROM	TO	00110211111111111111	Į,
Aroclor-1016	1	0.00	0.00	0.00	0.15	
	2	0.00	0.00	0.00	0.15	3
Aroclor-1260	1	0.00	0.00	0.00	0.14	
	2	0.00	0.00	0.00	0.15	4



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup	р	

Lab Sample ID:	B098949-BSD1		Date(s) Analyzed:	07/01/2014	07/01	/2014
Instrument ID (1):			Instrument ID (2):			
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%D
7.00.2112	002		FROM	TO	0011021111111111111	Į,
Aroclor-1016	1	0.00	0.00	0.00	0.14	
	2	0.00	0.00	0.00	0.14	2
Aroclor-1260	1	0.00	0.00	0.00	0.14	
	2	0.00	0.00	0.00	0.14	4



### IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

Matrix Spike

Lab Sample ID:	B098949-MS1		Date(s) Analyzed:	07/01/2014	07/01	/2014
Instrument ID (1):			Instrument ID (2):			
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%D
7.1.0.12112	002		FROM	TO	00110211111111111111	20
Aroclor-1016	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.20	1
Aroclor-1260	1	0.00	0.00	0.00	0.38	
	2	0.00	0.00	0.00	0.39	2



# IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

Matrix Spike Dup

Lab Sample ID:	B098949-MSD1		Date(s) Analyzed:	07/01/2014	07/01	/2014
Instrument ID (1):			Instrument ID (2):			
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%D
7.00.2112	002		FROM	TO	0011021111111111111	Į,
Aroclor-1016	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.21	4
Aroclor-1260	1	0.00	0.00	0.00	0.39	
	2	0.00	0.00	0.00	0.39	1



#### FLAG/QUALIFIER SUMMARY

- QC result is outside of established limits.
- † Wide recovery limits established for difficult compound.
- ‡ Wide RPD limits established for difficult compound.
- # Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the

calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.



#### CERTIFICATIONS

#### Certified Analyses included in this Report

Analyte	Certifications	
SW-846 8082A in Soil		
Aroclor-1016	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1016 [2C]	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1221	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1221 [2C]	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1232	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1232 [2C]	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1242	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1242 [2C]	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1248	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1248 [2C]	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1254	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1254 [2C]	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1260	CT,NH,NY,ME,NC,VA,NJ	
Aroclor-1260 [2C]	CT,NH,NY,ME,NC,VA,NJ	

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Publile Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2014

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# of Containers 18:00:42	39 Spruce Street East longmeadow, MA 01028	RECORD	CHAIN OF CUSTODY  Rev 04.05.12	abs.cc	On-test®

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

Date/Time: 172-Hr 14-Day  TRequire lab approval Other  Other S O V  Connecticut: 0  Australia S O V  Aust		Relinquished by: (signature)    Date/Time:   Turnaround   Detection Limit Requirements		Comments:  Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:				11 PTD-CB5-5-1733 W2SIn 1445 X S V X	1505 TO PTD-CBS-5-1732 TO 1505 TO	OP 275-CB1-5-1731 & 1450	08 975-CBS-5-1730 1515 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	07 PTD-885-S-1729 6/25/17/14/10 X S C X	Con-lest Lab ID Client Sample ID / Description Date/Time Date/Time Composite Grab Lode Conc Lode Ch	Collection O "Enhanced Date	Project Proposal Provided? (for billing purposes)  O yes  Promat:    Pormat:    Pormat:    Pormat:    Pormat:    Pormat:    Pormat:    O OTHER    O OTHER	Sampled By: Jill Russell Kyan Smith Email: Jest (2)	Varo 1 Fax# J Total Constitution of the consti	OFAX @EMAIL	DATA DELIVERY (check all that apply)	Andover, MA Client PO#	Address: 40 Shattuck Road Project # 210980 / ANALYSIS REQUESTED	Company Name: Woodard & Curran Telephone:	ANALY ICAL LABORATORY www.contestlabs.com	Fax: 413-525-6405  Email: info@contestlabs.com  Rev 04.05.12	Phone: 413-525-2332 CIXII OF COST CIXII OF C
MA State DW Form Required PWSiD#  NELAC & AIHA-LAP, LLC  Accredited  WBE/DBE Certified	Required	·~	n; U - Unknown SL = sludge O = other	<u> </u>	 *Matrix Code: GW= groundwater	T = Na thiosulfate O = Other	B = Sodium bisulfate X = Na hydroxide	S = Sulfuric Acid	M = Methanol	=	**Preservation		T=tedlar bag O=Other	S=summa can	ST=sterile	G=glass	^***Cont. Code: A=amber glass		O Lab to Filter	O Field Filtered	UESTED Dissolved Metals	***Container Code	** Preservation	# of Containers	East longmeadow, MA 01028

IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

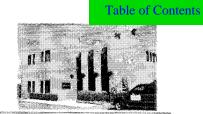
WBE/DBE Certified

† Require lab approval Other:

P: 413-525-2332 F: 413-525-6405 www.contestlabs.com



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### **Sample Receipt Checklist**

CLIENT NAME:	Wooder	15	_RECEIVED BY:	RLF D	ATE: 6 25 14
1) Was the cha	in(s) of custody relin	guished and sig	ned?	Yes No N	lo CoC Included
2) Does the ch	ain agree with the san			Yes No	
	amples in good cond not, explain:	ition?		Yes No	
4) How were th	e samples received:				
On Ice	Direct from Samp	oling 🔲	Ambient	In Cooler(s) 다	
Were the samp	les received in Tempo	erature Complia	nce of (2-6°C)?	Yes No N	I/A
Temperature °C	by Temp blank		_Temperature °C t	y Temp gun	5.3°C
5) Are there Di	ssolved samples for t	the lab to filter?		Yes (No	
Who was	notified	Date	Time		
6) Are there an	y RUSH or SHORT H	OLDING TIME sa	amples?	Yes No	
	notified		-		
				ission to subcontra	act samples? Yes No
7) Location whe	re samples are stored:	1	$\frown$ $\Box$		not already approved
, =====================================	o campio are cioi car	<i> </i>	<u> </u>	: Signature:	lot all cady approved
8) Do all sampl	es have the proper A	cid pH: Yes	No NA	oignaturo.	
o, so an oampi	es have the proper A	icia pi i. 165	110 144		
0) Do all campi	ac have the proper D	loop all. Yes	Na GUA		
_	es have the proper B	-	No N/A		
_	notified of any discre	epancies with th	e CoC vs the sam		N/A)
_	notified of any discre	epancies with th	·		N/A)
_	notified of any discre	epancies with th	e CoC vs the sam		# of containers
10) Was the PC	notified of any discre	epancies with th	e CoC vs the sam		
10) Was the PC	notified of any discre	epancies with th	e CoC vs the sam	on-Test	
1 Lite 500 m 250 mL Amb	r Amber L Amber er (8oz amber)	epancies with th	e CoC vs the same ceived at Co	amber/clear jar amber/clear jar amber/clear jar	
1 Lite 500 m 250 mL Amb	r Amber L Amber er (8oz amber) r Plastic	epancies with th	e CoC vs the same ceived at Co	amber/clear jar amber/clear jar amber/clear jar amber/clear jar iic Bag / Ziploc	
1 Lite 500 m 250 mL Amb 1 Lite 500 m	r Amber L Amber er (8oz amber) r Plastic L Plastic	epancies with th	e CoC vs the same ceived at Co	amber/clear jar amber/clear jar amber/clear jar cic Bag / Ziploc SOC Kit	
1 Lite 500 m 250 mL Amb 1 Lite 500 m 250 m	r Amber L Amber er (8oz amber) r Plastic L Plastic L plastic	epancies with th	8 oz 4 oz Plas	amber/clear jar amber/clear jar amber/clear jar ic Bag / Ziploc SOC Kit onTest Container	
1 Lite 500 m 250 mL Amb 1 Lite 500 m 250 m 40 mL Vial - t	r Amber L Amber er (8oz amber) r Plastic L plastic ype listed below	epancies with th	8 oz 4 oz Plasi	amber/clear jar amber/clear jar amber/clear jar cic Bag / Ziploc SOC Kit onTest Container rchlorate Kit	
1 Lite 500 m 250 mL Amb 1 Lite 500 m 250 m 250 m 40 mL Vial - t Colisure / b	r Amber L Amber er (8oz amber) r Plastic L Plastic L plastic ype listed below eacteria bottle	epancies with th	8 oz 4 oz Plasi Non-Co	amber/clear jar amber/clear jar amber/clear jar amber/clear jar ic Bag / Ziploc SOC Kit onTest Container rchlorate Kit shpoint bottle	
1 Lite 500 m 250 mL Amb 1 Lite 500 m 250 m 250 m Colisure / b Dissolved 0	r Amber L Amber er (8oz amber) r Plastic L plastic ype listed below	epancies with th	8 oz 4 oz Plasi Non-Co	amber/clear jar amber/clear jar amber/clear jar ic Bag / Ziploc SOC Kit onTest Container rchlorate Kit shpoint bottle her glass jar	
1 Lite 500 m 250 mL Amb 1 Lite 500 m 250 m 250 m Colisure / b Dissolved 0	r Amber L Amber er (8oz amber) r Plastic L plastic L plastic ype listed below eacteria bottle Dxygen bottle	epancies with th	8 oz 4 oz Plasi Non-Co	amber/clear jar amber/clear jar amber/clear jar amber/clear jar ic Bag / Ziploc SOC Kit onTest Container rchlorate Kit shpoint bottle	
1 Lite 500 m 250 mL Amb 1 Lite 500 m 250 m 250 m Colisure / b Dissolved 0	r Amber L Amber er (8oz amber) r Plastic L plastic L plastic ype listed below eacteria bottle Dxygen bottle	epancies with th	8 oz 4 oz Plasi Non-Co	amber/clear jar amber/clear jar amber/clear jar ic Bag / Ziploc SOC Kit onTest Container rchlorate Kit shpoint bottle her glass jar	
1 Lite 500 m 250 mL Amb 1 Lite 500 m 250 m 250 m 40 mL Vial - t Colisure / t Dissolved 0 Er Laboratory Comi	r Amber L Amber er (8oz amber) r Plastic L plastic L plastic ype listed below bacteria bottle Dxygen bottle icore ments:	# of containers	B oz 4 oz 2 oz Plasi  Non-Co  Fla: Ot	amber/clear jar amber/clear jar amber/clear jar ic Bag / Ziploc SOC Kit onTest Container rchlorate Kit shpoint bottle her glass jar Other	
1 Lite 500 m 250 mL Amb 1 Lite 500 m 250 m 250 m 250 m 40 mL Vial - t Colisure / t Dissolved 0 En Laboratory Comi	r Amber L Amber er (8oz amber) r Plastic L Plastic L plastic ype listed below eacteria bottle Dxygen bottle icore ments:	# Met	B oz 4 oz 2 oz Plasi Non-Co Pe Fla: Ot	amber/clear jar amber/clear jar amber/clear jar ic Bag / Ziploc SOC Kit onTest Container rchlorate Kit shpoint bottle her glass jar Other	# of containers
1 Lite 500 m 250 mL Amb 1 Lite 500 m 250 m 250 m 40 mL Vial - t Colisure / b Dissolved ( Er Laboratory Comi	r Amber L Amber er (8oz amber) r Plastic L plastic L plastic ype listed below bacteria bottle Dxygen bottle icore ments:	# Meti_# DI V	B oz 4 oz 2 oz Plasi Non-Co Pe Fla: Ot	amber/clear jar amber/clear jar amber/clear jar ic Bag / Ziploc SOC Kit onTest Container rchlorate Kit shpoint bottle her glass jar Other	# of containers

### Page 2 of 2 <u>Login Sample Receipt Checklist</u>

### (Rejection Criteria Listing - Using Sample Acceptance Policy) Any False statement will be brought to the attention of Client

<u>Question</u>	-	Answer (True/Fals	<u>se)</u> <u>Comment</u>
		T/F/NA	
1) The cooler's	custody seal, if present, is intact.	-	
	samples do not appear to have sed or tampered with.	<u> </u>	
3) Samples wer	e received on ice.	T	
4) Cooler Temp	erature is acceptable.		
5) Cooler Temp	erature is recorded.		
	out in ink and legible.	T	
7) COC is filled	out with all pertinent information.	T	
8) Field Sample	r's name present on COC.	T	
•	discrepancies between the he container and the COC.	T	
10) Samples are	received within Holding Time.	T	
11) Sample con	tainers have legible labels.		
12) Containers	are not broken or leaking.	T	
13) Air Cassette	s are not broken/open.	A	
14) Sample coll	ection date/times are provided.		
15) Appropriate	sample containers are used.	T	
16) Proper colle	ction media used.	T	
17) No headspa	ce sample bottles are completely filled.		
· ·	ficient volume for all requsted ding any requested MS/MSDs.	7	
19) Trip blanks	provided if applicable.	LA	
	e vials do not have head space or (1/4") in diameter.	NA.	
21) Samples do	not require splitting or compositing.		
Doc #277 Rev.	Who notified of Fal 4 August 2013 Log-In Technician I		Date/Time: Date/Time:
			RLF 6 35/14 1820

		MADE	P MCP Analytical M	lethod Report Cert	tification Form		
Laboratory Name: Con-Test Analytical Laboratory					Project #: 14F1211		
Project Location: Harvard - Peabody Terrace RTN:					RTN:		
This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]							
14F1211-01 thru 14F1211-11							
Matrices: Soil							
CAM Protocol (check all that below)							
8260 VOC CAM II A ( )		7470/7471 Hg CAM IIIB ()	MassDEP VPH CAM IV A ( )	8081 Pesticides CAM V B ( )	7196 Hex Cr CAM VI B ( )	MassDEP APH CAM IX A ( )	
8270 SVOC CAM II B ()		7010 Metals CAM III C()	MassDEP EPH CAM IV A ( )	8151 Herbicides CAM V C ( )	8330 Explosives CAM VIII A ( )	TO-15 VOC CAM IX B ( )	
	Metals III A ()	6020 Metals CAM III D ( )	8082 PCB CAM V A (X)	9014 Total Cyanide/PAC CAM VI A ( )	6860 Perchlorate CAM VIII B ( )		
Affirmative response to Questions A throughF is required for "Presumptive Certainty" status							
Α	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?					☑ Yes	□No¹
В	Were the analytical method(s) and all associated QC requirements specificed in the selected CAM protocol(s) followed?					☑ Yes	□No¹
С						☑ Yes	□No¹
Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidlines for the Acquisition and Reporting of Analytical Data?						☑ Yes	□No¹
Еa	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).					☐Yes	□No¹
Εb							□No¹
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Qestions A through E)?					☑ Yes	□No¹
A response to questions G, H and I below is required for "Presumptive Certainty" status							
G Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?						☑ Yes	□No¹
<u>Data User Note:</u> Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.							
I	H Were all QC perfomance standards specified in the CAM protocol(s) achieved?						$\square_{No^1}$
Were results reported for the complete analyte list specified in the selected CAM protocol(s)?						☑ Yes	□No¹
<sup>1</sup> All Negative responses must be addressed in an attached Environmental Laboratory case narrative.							
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.							
Signature: Position: Laboratory Director							
Printed Name: Michael A. Erickson Date: 07/02/14							